

**TRIP REPORT AND TECHNICAL NOTES FOR
COST RECOVERY PROJECT
IN MINISTRY OF HEALTH FACILITIES
ARAB REPUBLIC OF EGYPT**

**GREGORY C. BECKER
ABT ASSOCIATES INC.**

NOVEMBER 26 - DECEMBER 15, 1990

ABSTRACT

Technical assistance to the Egyptian Cost Recovery for Health Project (CRHP) led to the development of facility standards and a Facility Assessment Instrument. It is a tool to assess the condition of candidate facilities for conversion to cost recovery and measure needs. Specifically, the Facility Assessment Instrument provides project management with information to make resource allocation decisions based on the facilities prioritized needs.

Health Financing and Sustainability

TRIP REPORT AND TECHNICAL NOTES

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NOVEMBER 26 - DECEMBER 15, 1990

**GREGORY C. BECKER
ABT ASSOCIATES INC.**

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Submitted to:
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S&T/H/HSD

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SUMMARY

Greg Becker, Standards and Assessment Specialist for the Health Financing and Sustainability (HFS) Project, visited Cairo for the second phase of the response to a Mission request for technical assistance to one component ("Component One") of the Cost Recovery Program for Health.

Mr. Becker met with USAID/Cairo and Egyptian Cost Recovery for Health Project officials, and worked with Embaba Hospital officials. He provided interim technical assistance to the Cost Recovery for Health Project on the development of facility standards, and the completion of the Facility Assessment Instrument.

The Facility Assessment Instrument will be completed by Embaba Hospital personnel and reviewed by Cost Recovery for Health personnel after this visit and prior to the next visit of this consultant. The Instrument will allow for a thorough analysis of the present condition and anticipated needs of Embaba Hospital or other candidate facilities, and will provide project management with sufficient information to make resource allocation decisions based on the facility's prioritized needs.

OBJECTIVES

The second visit to the Arab Republic of Egypt by the Standards and Assessment Advisor was a continuation of work begun on the Egyptian Cost Recovery Project under the Health Financing and Sustainability (HFS) Project. The specific purpose of this visit was to continue to provide technical assistance to the Standards Committee on the development of facility standards, and to deliver a usable instrument for the evaluation of facilities entering into the Cost Recovery Project.

ACTIVITIES

The primary activity of the visit was a consultation with Project Directorate staff and Standards Committee members on the development of the *Facility Assessment Instrument*. The instrument was completed and has been submitted to the Project Directorate for comment. In the interim between the second and third visits of the Standards and Assessment Advisor to Egypt, the instrument will be forwarded to the Embaba Hospital, so that hospital personnel may become familiar with its contents in preparation for an anticipated application of the instrument in late January 1991.

Meetings were also held with the Standards Committee, and the sub-committees on Pediatrics, Architecture and Engineering (A&E), Nursing, ICU, Medical Records, Pharmacy, Management, Dentistry, Laboratory, and Radiology. Progress to date on standards development was reviewed, and the goals of the committee were again specified in great detail. Major progress should be forthcoming.

An inspection visit was paid to Embaba Hospital. Major findings of the visit were an enthusiastic staff, but poor conditions in terms of A & E, equipment, and maintenance. Also, the new addition to the hospital was examined. Although near completion, construction appeared to be substandard in terms of both structure and finish. Completing and equipping the new addition will require major investment of resources.

FINDINGS, CONCLUSIONS, AND FOLLOW-UP

Standards and Evaluation Progress and Future Direction

In reviewing the progress to date by the different standards committees, the present status of the project, and the emphasis on commencing the project at the three pilot hospitals, it has become clear that certain aspects of the Standards and Assessment process must be modified to meet current needs.

The Project Directorate has already made some preliminary estimates and architectural drawings for the renovation of the Embaba Hospital. What has become clear from evaluating these estimates and plans is that they were based on "walk-through" evaluations of the hospital's needs. Although a walk-through assessment is an excellent first step in the selection process, any plans developed with this method will inevitably have large gaps in problems covered,

and will not necessarily address the hospital's needs according to actual priorities. The sole use of the walk-through assessment should be to initially determine whether the facility appears to have the potential to function successfully as a cost recovery facility.

Development of any conversion plans based on these initial findings is an unnecessary expense and runs the risk of developing a "mind-set" as to what is needed by the facility. In other words, once an investment is made in plans and drawings, there will be a tendency to stick to the original ideas despite contradictory evidence that may be gathered in later, more in-depth analyses.

Once the initial walk-through assessment is completed and the facility is determined to have substantial potential as a cost recovery facility, a methodical and directed evaluation of the hospital's needs in the areas of technical assistance, reconstruction and renovation, and equipment needs must be completed. Given the limited amount of funds available for the conversion of each facility through the life of the project, it is critical that decisions on the allocation of project funds be made on the basis of complete analysis of needs.

With this factor in mind, the emphasis of the Standards and Assessment Advisor's second visit to Egypt was on the completion of the *Facility Assessment Instrument* that will allow a thorough analysis of the present condition of the facility, and its anticipated needs, and provide project decision makers with sufficient information to make resource allocation decisions based on the facility's prioritized needs.

Facility Assessment Instrument

The instrument consists of five parts: 1) the Facility Mission Assessment; 2) the Administrative and Medical Services Operational Assessment; 3) the Engineering Assessment; 4) the Architectural Assessment; and, 5) the Equipment Needs Assessment.

Facility Mission Assessment

The Facility Mission Assessment is designed to capture basic information on the major functions of the facility at present and after conversion to cost recovery. The Assessment examines such areas as patients presently served, medical services presently provided, and solicits information concerning which services are potential revenue generators, and what service mix should be provided after conversion. The results of this assessment will be vital to all following facility conversion activities, as a clear "Mission Statement" will provide guidance in the allocation of A & E, technical assistance, and equipment funds, and will be a key factor in determining priorities.

Administrative and Medical Services Operational Assessment

This part of the instrument is designed to gather baseline data on the administrative, management, and medical services of the facility. Key indicators have been selected from the standards in these areas to determine a facility's relative strengths and weaknesses and to give an indication of the need for

technical assistance. Data provided by this assessment will allow the Project Directorate to evaluate training and technical assistance needs, and to assist the facilities in developing plans for incorporating these activities into the overall conversion program.

The usefulness of this assessment is limited, however. The project has no information as to the cost of technical assistance, nor on how it will be provided. It is therefore not presently possible to develop a cost estimate on technical assistance needs for the facility.

The assumption can be made that needs for administrative and management training and technical assistance will be similar across facilities. This assumption can allow the future facilities to be chosen based on comparisons of needs in equipment and A&E. It does not, however, allow the Directorate to make total cost projections for the facilities it is now bringing into the project. This lack of a total cost estimate will hamper the prioritization and approval of renovations and purchases in the equipment and A&E areas. Without a baseline estimate for training and technical assistance costs, the amount of funds available in the other two areas will remain unknown.

Engineering Assessment

The engineering assessment is designed to evaluate the physical plant of the facility, and its mechanical and construction status. The assessment will point out problem areas through a methodical, room-by-room, system-by-system appraisal of conditions and need for repair, renovation, or construction. The assessment will also provide a cost estimate for each section and system of the facility that needs repair or upgrading.

When the results of this assessment are analyzed in light of the Facility Mission Statement, priorities for engineering improvements can be made, and funds can be allocated according to availability and similarly prioritized competing demands.

Architectural Assessment

The architectural assessment is a structured approach to determining the adequacy of facility and section space/area suitability, traffic flow, section location relative to related services, and the internal arrangement of each section. The assessment also rates the need for modification/expansion of the above aspects for each section, and gives the comparative difficulty rating of such modification.

Finally, a total cost estimate is provided for the modification of the section. As with the other assessments, this instrument will provide a prioritization of needs when combined with the Mission Statement. These needs can then be balanced against the competing needs of other renovations/upgrades, with funds allocated accordingly.

Equipment Needs Assessment

The process of assessing equipment needs has proven the most problematic. Different assessment methodologies have been examined, and one of them has been

developed into an instrument. The comparative advantages and disadvantages of these different methodologies are examined below.

In approaching the re-equipping of an operating facility, two basic strategies may be followed. The first of these, and the one most likely to be pursued after minimal analysis, is to evaluate the "big ticket" biomedical equipment possessed by the facility, determine gaps in coverage, and procure new equipment accordingly. Such an equipping strategy has the advantages of need being relatively easy to evaluate, since the potential equipment list is small, and procurement being easier because of smaller numbers of individual items to be tendered and tracked.

The main constraint in following such a strategy is the impact on the quality of patient care. Although the quality of patient care would likely rise given increased diagnostic capabilities through the procurement of a new x-ray machine or laboratory analyzer, such an improvement must be compared to an equivalent investment in basic equipment.

If the facility in question is well stocked with basic equipment, the return on investment for advanced diagnostic or treatment equipment could be substantial. If, however, the facility has a shortage of basic equipment (as is apparently the case with MOH hospitals), a much higher return on investment (in terms of improved quality of care) would likely be obtained through the procurement of basic tools that would be used in patient care.

An over-simplified example of this would be the purchase of an x-ray apparatus that would improve the accuracy of tumor diagnoses. If the facility is short of surgical tools, improved detection of pathology would have little benefit if surgery was either unsuccessful or not scheduled due to lack of forceps.

The analysis of equipment needs must therefore examine all levels of equipment, and establish priorities based on return on investment in terms of improved quality of care. The increased complexity of such a thorough analysis and procurement process is justified by ethical imperatives.

The following exhibit compares the methodologies available to determine equipment needs:

EQUIPMENT ASSESSMENT METHODOLOGIES

EXHIBIT 1

INVENTORY BY DIRECTORATE STAFF	
ADVANTAGES	DISADVANTAGES
ACCURATE REDUCES RISK OF "WISH LIST" EQUIPMENT DEMANDS LESS SUBJECT TO "STRONG STAFF - WEAK STAFF" INFLUENCE	EXPENSIVE TIME CONSUMING REQUIRES DETAILED EQUIPMENT LISTS FOR EACH SIZE AND TYPE OF FACILITY TO BE EVALUATED RESULTS MUST BE CROSS-MATCHED AGAINST EXTENSIVE EQUIPMENT LISTS LITTLE INPUT BY EQUIPMENT USERS

NEEDS ASSESSMENT CONDUCTED BY FACILITY STAFF	
ADVANTAGES	DISADVANTAGES
INEXPENSIVE INCORPORATES NEEDS OF USERS RELATIVELY ACCURATE IF ASSESSMENT PROTOCOLS ARE WELL DEFINED AND EXPLAINED	SUBJECT TO STAFF PREJUDICES DEPENDENT ON LEVEL OF EFFORT EXPENDED BY STAFF COULD GENERATE "WISH LISTS" IF NOT CAREFULLY CONTROLLED AND EVALUATED BY DIRECTORATE STAFF

ASSESSMENT CONDUCTED BY PURCHASING AGENT/EQUIPMENT FIRM	
ADVANTAGES	DISADVANTAGES
ACCURATE ABLE TO USE EXISTING DATABASES OF EQUIPMENT CHECKLISTS	POTENTIAL CONFLICT OF INTEREST EXPENSIVE LITTLE INPUT BY EQUIPMENT USERS

In evaluating these different methodologies, two pitfalls must be avoided. The first of these is the potential for "wish lists" of big-ticket equipment being developed. The argument against such purchases has been discussed above. The second potential problem is the expense of performing the assessment. Every dollar spent on assessment is one less dollar spent on equipment, A&E renovations, or technical assistance. Although a certain level of expense in this area is necessary to assure optimum equipment selection, the amount should be limited to the extent possible.

Based on these concerns, the methodology chosen for immediate development is the *Needs Assessment Conducted by Facility Staff*. The most important advantages of this system are its low cost and the benefit of the direct input of the end users of the equipment. The disadvantages should be overcome by adequate emphasis on pre-assessment training of facility staff, and careful monitoring of the results.

There remains a question as to the adequacy of this assessment methodology used in isolation. A field test of this instrument is therefore critical. Further analysis will be conducted on possible modified use of one of the other two methodologies in combination with the Staff Assessment. The field test should largely answer this question, and the Standards and Assessment Consultant will seek additional advice from outside experts in this field.

Facility Assessment Results Analysis

Once the Facility Assessment on the candidate hospital is completed, the results must be collated and analyzed to obtain priorities and cost estimates in the areas of Technical Assistance, A & E, and Biomedical Equipment. These competing needs must then be evaluated in comparison to each other, and resource allocation decisions must be made.

It is suggested by the Standards and Assessment Advisor that the data gathered through the assessment process be entered into some form of management decision assistance software package, either based on a spreadsheet or database platform.

In the following exhibits, (Exhibits 2 and 3) *EQUIPMENT ASSESSMENT, EMBABA GENERAL HOSPITAL, EXAMPLES 1 & 2*, hypothetical data from an equipment assessment of the facility has been entered into an abbreviated model of a spreadsheet-based management decision assistance program. In this model, hypothetical equipment needs and prices have been entered, and can be manipulated in "what-if" scenarios. In *Example 1*, the *Number Approved* is the *Standard Number* minus the *Number Present*. In this example, all needed equipment is approved, resulting in a total cost of over \$33,000. This alternative is developed by the *Biomedical Equipment/ Logistical Expert*, and is presented to the Project Director. After similar presentations on A&E needs and training, administrative, and management needs by the appropriate experts to the Project Director, it is determined that there are insufficient funds to provide all of the equipment, A&E, and technical assistance requested. The approval criteria can then be moved to a higher priority level basis, and the *Number Approved* reduced accordingly as in *Example 2*.

In the case of *Example 2*, total equipment costs have been reduced to under \$19,000. If similar decision tools are employed in A&E and technical assistance, the Project Directorate can run numerous scenarios until the one achieving the greatest balance between competing priorities is developed.

It is therefore recommended by the Standards and Assessment Advisor that such tools be developed by the Hospital Administration, A&E, and Biomedical Equipment/ Logistics Experts as soon as they are hired by the project. Technical assistance in the development of these tools can be provided by the Standards and Assessment Advisor as a part of the proposed expanded scope of work.

EXHIBIT 2 EQUIPMENT ASSESSMENT

EMBABA GENERAL HOSPITAL

EXAMPLE 1

TOTAL COST: \$33,625.00

ITEM NUMBER	ITEM	PRICE	STANDAR NUMBER	NUMBER PRESENT	NUMBER APPROVED	COST	SPECIFICATION AVAILABLE	SOURCE
2.434	EXAMINATION COUCH	\$300.00	2	1	1	\$300.00	N	LOCAL
2.435	TWO-STEP FOOTREST	\$30.00	1	0	1	\$30.00	N	LOCAL
2.436	STOOL	\$30.00	1	0	1	\$30.00	Y	L
2.438	SOILED DRESSING BIN	\$100.00	2	1	1	\$100.00	Y	L
2.439	EXAMINATION LAMP	\$300.00	2	1	1	\$300.00	Y	L
2.440	CABINET (APPROX. 0.54 X 0.41 X 1	\$150.00	2	1	1	\$150.00	Y	L
2.441	MEDICAL SCALE, 130kg CAPACIT	\$300.00	2	1	1	\$300.00	Y	L
1.604	SPHYGMOMANOMETER	\$30.00	2	1	1	\$30.00	N	L
1.605	STETHOSCOPE	\$25.00	3	0	3	\$75.00	N	L
1.560	REFLEX HAMMER	\$10.00	5	0	5	\$50.00	N	L
7.106	X-RAY FILM VIEWER, TWO PAN	\$300.00	2	1	1	\$300.00	Y	IMPORT
5.64	AUTOMATIC HEMATOLOGY AN RBC, WBC, HGB, HCT, PLT, MCV, MCH, MCHC, LYMPH % AND NUMBER	\$10,000.00	1	0	1	\$10,000.00	N	I
5.68	LEUKOCYTE DIFFERENTIAL FL	\$5,000.00	1	0	1	\$5,000.00	N	I
5.204	DUAL CHANNEL AUTOMATIC A MEASURE PLATELET AGGREGATION	\$4,500.00	1	1		\$4,500.00	N	I
5.24	BINOCULAR MICROSCOPE, X4, (OIL IMMERSION) OBJECTIVES, BRIGHT FIELD CONDENSER	\$2,000.00	2	1	1	\$2,000.00	N	I
5.201	HEMATOCRIT CENTRIFUGE	\$1,000.00	1	1		\$1,000.00	Y	L
5.202	UNIVERSAL THERMOSTATED	\$300.00	2	0	2	\$1,000.00	Y	L
5.31	VORTEX MIXER	\$200.00	1	1	0	\$200.00	Y	L
5.209	UV/VISIBLE SPECTROPHOTOME	\$300.00	1	0	1	\$300.00	N	L
5.210	ELECTROPHORESIS SYSTEM	\$750.00	1	1	0	\$0.00	N	I
5.03	BENCH TOP CENTRIFUGE 0 TO 6	\$800.00	2	1	1	\$800.00	Y	L
5.09	ELECTRONIC BALANCE	\$1,000.00	1	1	0	\$0.00	Y	L
5.25	BINOCULAR MICROSCOPE,BRIG OBJECTIVES: 4X, 10X, 40X, 100X,ILLUMINATION	\$2,000.00	2	0	2	\$4,000.00	Y	I
5.26	MICROSCOPE FOR FLUORESC	\$2,500.00	1	1	0	\$0.00	N	I
5.111	INCUBATOR, AMBIENT TO 60C	\$450.00	1	1	0	\$0.00	N	L
5.112	OVEN, 60C TO 220C	\$300.00	1	1	0	\$0.00	N	L
5.221	COLONY COUNTER	\$2,300.00	1	0	1	\$2,300.00	N	L
5.04	BENCH CENTRIFUGE 3300 RPM	\$300.00	1	1	0	\$0.00	N	L
5.08	UNIVERSAL THERMOSTATED	\$250.00	1	1	0	\$0.00	N	L
5.413	ANAEROBIC JAR	\$400.00	2	1	1	\$400.00	N	I

EXHIBIT 3 EQUIPMENT ASSESSMENT

EMBABA GENERAL HOSPITAL

EXAMPLE 2

TOTAL COST: \$18,925.00

ITEM NUMBER	ITEM	PRICE	STANDAR NUMBER	NUMBER PRESENT	NUMBER APPROVED	COST	SPECIFICATION AVAILABLE	SOURCE
2434	EXAMINATION COUCH	\$300.00	2	1	1	\$300.00	N	LOCAL
2435	TWO-STEP FOOTREST	\$30.00	1	0	0	\$0.00	N	LOCAL
2436	STOOL	\$30.00	1	0	0	\$0.00	Y	L
2438	SOILED DRESSING BIN	\$100.00	2	1	0	\$0.00	Y	L
2439	EXAMINATION LAMP	\$300.00	2	1	1	\$300.00	Y	L
2440	CABINET (APPROX. 0.54 X 0.41 X 1	\$150.00	2	1	0	\$0.00	Y	L
2441	MEDICAL SCALE, 130kg CAPACT	\$300.00	2	1	0	\$0.00	Y	L
1.604	SPHYGMOMANOMETER	\$30.00	2	1	1	\$30.00	N	L
1.605	STETHOSCOPE	\$25.00	3	0	3	\$75.00	N	L
1.560	REFLEX HAMMER	\$10.00	5	0	0	\$0.00	N	L
7.106	X-RAY FILM VIEWER, TWO PAN	\$300.00	2	1	0	\$0.00	Y	IMPORT
5.64	AUTOMATIC HEMATOLOGY AN RBC, WBC, HGB, HCT, PLT, MCV, MCH, MCHC, LYMPH % AND NUMBER	\$10,000.00	1	0	1	\$10,000.00	N	I
5.66	LEUKOCYTE DIFFERENTIAL FL	\$5,000.00	1	0	0	\$0.00	N	I
5.204	DUAL CHANNEL AUTOMATICA MEASURE PLATELET AGGREGATION	\$4,500.00	1	1	0	\$0.00	N	I
5.24	BINOCULAR MICROSCOPE, X4, (OIL IMMERSION) OBJECTIVES, BRIGHT FIELD CONDENSER	\$2,000.00	2	1	1	\$2,000.00	N	I
5.201	HEMATOCRIT CENTRIFUGE	\$1,000.00	1	1	0	\$0.00	Y	L
5.202	UNIVERSAL THERMOSTATED	\$300.00	2	0	1	\$300.00	Y	L
5.31	VORTEX MIXER	\$200.00	1	1	0	\$0.00	Y	L
5.209	UV/VISIBLE SPECTROPHOTOME	\$300.00	1	0	0	\$0.00	N	L
5.210	ELECTROPHORESIS SYSTEM	\$750.00	1	1	0	\$0.00	N	I
5.03	BENCH TOP CENTRIFUGE 0 TO 6	\$800.00	2	1	1	\$800.00	Y	L
5.09	ELECTRONIC BALANCE	\$1,000.00	1	1	0	\$0.00	Y	L
5.25	BINOCULAR MICROSCOPE, BRIG OBJECTIVES: 4X, 10X, 40X, 100X, ILLUMINATION	\$2,000.00	2	0	1	\$2,000.00	Y	I
5.26	MICROSCOPE FOR FLUORESC	\$2,500.00	1	1	0	\$0.00	N	I
5.111	INCUBATOR, AMBIENT TO 60C	\$450.00	1	1	0	\$0.00	N	L
5.112	OVEN, 60C TO 220C	\$300.00	1	1	0	\$0.00	N	L
5.221	COLONY COUNTER	\$2,300.00	1	0	1	\$2,300.00	N	L
5.04	BENCH CENTRIFUGE 3300 RPM	\$300.00	1	1	0	\$0.00	N	L
5.06	UNIVERSAL THERMOSTATED	\$250.00	1	1	0	\$0.00	N	L
5.613	ANAEROBIC IAR	\$400.00	2	1	1	\$400.00	N	I

Progress on the Development of Standards

Progress on the development of standards has been slow. Actual standards have been developed in only two additional areas from those completed at the end of the Standards and Assessment Advisor's last trip.

This slow progress cannot be attributed only to the level of effort of the Directorate in this area. A substantial part of the difficulty has been a lack of understanding as to what a *standard* is.

Appendix A is the result of many discussions with Directorate staff on the definition of a standard. The English version was compiled and translated into Arabic by the Directorate staff with the intention of distributing a copy of it to all Standard Committee Members. In addition, copies of the two sets of standards that were developed in Egypt, ICU and Anesthesiology, will also be distributed to committee members as an excellent example of what the standards should look like.

Despite the slow progress on standards development, there has been a sizable body of work developed by certain members of the Standards Committee that will serve a valuable purpose in the future activities of the project. Specifically, much effort has gone into developing narratives on what constitutes a good level of patient care, and how this level may be achieved. These narratives will prove valuable to the facilities being converted to cost recovery as a basis for their development of plans to meet the standards.

One group, the Committee on Medical Records, has made much progress on the development of a medical records system to be adopted by the cost recovery hospitals. While the group still needs to complete medical records standards, they have developed a very well designed medical records system.

Proposal for Future Activity

In light of the progress to date, the pressure on the Directorate to convert hospitals rapidly, and the lack of a long-term contractor, the following proposal is made for further work in the Standards and Assessment area:

Field Testing of the Initial Screening Instrument and Provision of Technical Assistance in Planning and Implementation Management

1. Under the current Scope of Work for a Standards and Assessment Advisor from the HFS Project, an Initial Assessment Instrument and Facility Standards are being developed for hospitals which will participate in the Cost Recovery Project. As a logical follow-on to the existing SOW, a consultant can assist in field testing and adjusting the Assessment Instrument, analyzing the results of the assessment, and developing and implementing conversion plans based on the facility standards, the results of the facility assessment, and a rational prioritization of needs based on these analyses.

2. The Standards and Assessment Advisor/Facility Conversion Advisor will assist Project Directorate staff to evaluate one of the pilot hospitals using the Initial Assessment Instrument to determine its accuracy and usability. The Assessment will cover three basic functional areas that are under the domain of Directorate staff specified earlier in this proposal. Specifically, the Facility Mission Statement and Management and Operational Status will fall under the control of the Hospital Administration Expert, the Engineering and Architectural Assessment will be under the control of the A & E Expert, and Biomedical Equipment needs will be under the control of the Equipment/Logistical expert. The anticipated results of this trial run will be rough cost figures which can be used in the development of a detailed renovation plan based on a methodical assessment of the facility's needs. This activity will include the following steps:
 - (a) Plan the field test
 - (b) Brief the Directorate staff and prepare for the field test
 - (c) Conduct the field test within three or four days in the facility, and
 - (d) Prepare a report on (1) screening results and (2) the process and the instrument.
3. This work will be carried out in one visit to Egypt of three weeks and with three weeks of work in the U.S. for preparation and follow-up.
4. Once data has been gathered on the present state of operations, A & E, and biomedical equipment, each hospital must plan the actions to be taken in its project-supported upgrading and in the introduction of new cost recovery policies. This planning must be based on a thorough and methodical assessment of the present state of the facility, and a rational prioritization of the facility's needs. The roles of the Directorate staff, facility staff, and local consultants engaged by the Directorate are unclear at present. Advisors from the HFS Project will be able to assist the Directorate to begin planning and managing the implementation of conversion to cost recovery.
5. The Facility Conversion Advisor can develop capability within the Directorate staff to plan, develop, and manage implementation plans for the upgrading of facilities and conversion to cost recovery. This consultant will also help the Directorate to provide technical assistance and oversight to the first two or three hospitals developing and implementing their plans for conversion to cost recovery facilities.
6. Through workshops or other training media, the consultant will help those responsible from the Directorate and facility staff to understand the importance of planning the upgrading to standards and the conversion to cost recovery, to learn how to use the standards for planning, to analyze and use the results of the screening instrument, and to generate and monitor implementation of the plans. This assistance will include but not be limited to identification, adaptation, and/or development of planning guidelines, analysis tools, and/or checklists.

- (a) The consultant will conduct a workshop for Directorate staff and Directors (and/or Deputy Directors) of each of the first three hospitals. This workshop will train them in the general process of planning and management of upgrading and conversion. The hospital Directors will learn to lead planning workshops with their own staffs for the process of conversion.
 - (b) The consultant will also hold a planning workshop with staff from the Directorate and from the first facility. Such a workshop will be specific to the planning process at a particular facility. The Directorate staff will become responsible for helping to conduct similar workshops or training throughout the life of the cost recovery project for relevant personnel from facilities undergoing conversion.
7. The consultant can also provide technical assistance and oversight to the hospitals as they implement their plans, as follows:
- (a) On a regular basis (for example, bimonthly for the next eight or nine months), the consultant will review, with the Directorate and facility staff, progress relative to plans in all areas and consider what adjustments are needed. Plans can be revised and scopes of work for consultants can be drafted, as needed. The consultant will prepare a report documenting the conversion process, noting both plans and problems encountered. These reports will provide useful guidance to the Directorate and the long-term technical assistance contractor in improving planning and implementation procedures.
 - (b) The consultant will also be available to provide guidance to Directorate staff by telephone on an as-needed basis.

RECOMMENDED ADDITIONS TO DIRECTORATE STAFF

In order to carry out its mission of converting hospitals into cost recovery facilities, the Project Directorate needs to substantially increase its capabilities in several areas. Before further progress can be made in the Standards and Assessment/Facility Conversion areas, it is imperative that the following positions be filled:

HOSPITAL ADMINISTRATION EXPERT

Qualifications:

Ten to 15 years' experience in the management and administration of health care facilities in the Middle East. Training and education in Western management theory and technique.

Responsibilities:

Carry out assessments of facilities being considered for inclusion in the cost recovery program through an initial *walk-through assessment*, followed by a detailed assessment of the chosen

facilities through the use of the *Initial Facility Screening Instrument* in the areas of *Mission Statement*, and *Administrative and Medical Services Operational Assessment*.

Compile and analyze data gathered through the assessment instrument, determine facility needs in the areas of technical assistance and administrative, management, and medical training. Prepare reports on these needs for the Project Director and the Facility Director, and with them, develop priorities in these areas.

Assist facilities in the development and implementation of plans for conversion to cost recovery.

Coordinate, procure, monitor, and evaluate technical assistance and training in the areas of administration, management, and medical services.

ARCHITECTURE AND ENGINEERING EXPERT

Qualifications:

Ten to 15 years' experience in architecture, engineering, and construction of health care facilities in the Middle East. Appropriate training and education.

Responsibilities:

Carry out assessments of facilities being considered for inclusion in the cost recovery program through an initial *walk-through assessment*, followed by a detailed assessment of chosen facilities through the use of the *Initial Facility Screening Instrument* in the areas of *Architecture and Engineering*.

Compile and analyze data gathered through the assessment instrument, determine facility needs in the areas of architectural and engineering renovation. Prepare reports on these needs for the Project Director and the Facility Director, and with them, develop priorities in these areas.

Assist facilities in the development and implementation of plans for conversion to cost recovery.

Coordinate, procure, monitor, and evaluate architectural, engineering, and construction services in project facilities.

BIOMEDICAL EQUIPMENT/LOGISTICS EXPERT

Qualifications:

Ten to 15 years' experience in biomedical equipment management, procurement, and maintenance in the Middle East. Appropriate training and education.

Responsibilities:

Carry out assessments of facilities being considered for inclusion in the cost recovery program through an initial *walk-through assessment*, followed by a detailed assessment of chosen facilities through the use of the *Initial Facility Screening Instrument* in the area of *Biomedical Equipment Needs*.

Compile and analyze data gathered through the assessment instrument, determine facility needs for the Project Director and the Facility Director, and with them, develop priorities in this area.

Assist facilities in the development and implementation of plans for conversion to cost recovery.

Coordinate, monitor, and evaluate the procurement of biomedical equipment for project facilities.

APPENDIX A

DEFINITION

Standards are defined as "rules, usually quantified or at least quantifiable, by reference to which behavior is judged and approved or disapproved."

In other words, it is the desired and achievable level of performance against which actual practice is compared.

Standards are classified into the following:

- **Input Standards** - Define the proportion or nature of resources (personnel, area, equipment, etc.) needed for producing the activity or service to be supplied (e.g., area per bed).
- **Output Standards** - Indicate the volume or type of production to be expected from the application of these resources (e.g., tests per month).
- **Operational Standards** - Comprise both **technical** standards, which indicate the technical process to be followed, and **administrative** standards, which indicate the management system or control that is to be followed.

DESCRIPTION OF THE STANDARDS

Standards which clearly define both economic and functional goals help to prevent the wasting of scarce resources on renovation which is inappropriate to local conditions.

A basic objection against standards is the fact that standards act in some cases as barriers to the emergence of new ideas and provide justification for maintaining present poor practices. Standards should not close minds to the possibility that more efficient methods may be available.

In developing countries, standards often tend to be too high, imposing unrealistic claims upon existing resources. A problem which frequently arises when standards are based on indiscriminate use of imported standards from the industrialized countries, without change and necessary adaptation, is the wasting of limited resources instead of promoting desired progress.

Although foreign regulations should not simply be translated for implementation in developing countries, they can represent a valuable reference source where standards are to be developed from scratch. They can be used as a check list of areas or elements which should not be forgotten.

Standards should take into account current realities, for example, where there is a lack of nursing personnel, it is more realistic to develop requirements for the treatment of an infectious case, than to set standards specifying the number of qualified nurses per facility.

Standards should first be set to be applicable to the greatest number of facilities, such as norms concerning general hospitals.

**COST RECOVERY FOR HEALTH PROJECT
ARAB REPUBLIC OF EGYPT**

FACILITY ASSESSMENT INSTRUMENT

وزارة الصحة

مشروع تطوير الخدمات الصحية

(استرداد نفقات العلاج عن طريق التكافل بين المواطنين)

FACILITY MISSION ASSESSMENT

INSTRUCTIONS FOR USE

GENERAL INSTRUCTIONS

This assessment should be completed by a team consisting of a facility assessment manager, the hospital director, the chief of the medical staff, the heads of finance and administration, the matron, and the heads of medical records and any other statistical or information gathering sections.

Each of the statistical questions (those asking for information on numbers of patients cared for, and services sought) should be completed by the staff member having the most complete information in the particular area. The answers should then be reviewed by the rest of the evaluation team for completeness and accuracy.

The *judgmental questions* (those asking for qualitative answers or predictions of future events) should be answered by the entire team by discussing the question then recording the consensus answer.

FACILITY MISSION ASSESSMENT

FACILITY:

FACILITY DIRECTOR:

CHIEF EVALUATOR:

How many inpatient beds does the facility now have?

Is there a plan for this number to increase or decrease in the next 3 years?

What are present numbers of:

first class beds:

second class beds:

third class beds:

free beds:

paying beds:

ICU beds:

pediatric beds:

neonatal beds:

What are the planned numbers of beds under the cost recovery program:

first class beds:

second class beds:

third class beds:

free beds:

paying beds:

ICU beds:

pediatric beds:

neonatal beds:

How many patients are admitted each year?

What is the average length of stay?

What is the number of patient days per year?

What is the occupancy rate?

Are any of these numbers expected to change in the next three years? -- If yes, why?

What is the present number of outpatients treated per year at the facility?

Is this number expected to increase or decrease? -- If yes, why?

What medical services are provided to inpatients? Please list and explain:

What are the most important services offered to inpatients in terms of numbers of patients treated? Please list:

**What specialty medical services (i.e. renal transplantation, laser surgery, etc.) are provided to inpatients?
Please describe:**

**Which services offered to inpatients have the greatest potential for
generating income? Please explain:**

Will these services be expanded under the cost recovery program?

What medical services are provided to outpatients? Please list and explain:

What are the most important services offered to outpatients in terms of numbers of patients treated? Please describe:

What specialty medical services (i.e. renal dialysis, ambulatory surgery) are provided to outpatients? Please describe:

Which services offered to outpatients have the greatest potential for generating income?

What services will be expanded under the cost recovery program?

How many casualty (emergency room) visits are there each year?

What type of service is offered in the casualty (emergency room)?

What is the primary role of the facility? (for example: General hospital serving primarily adults; General hospital providing significant levels of Obstetrical and pediatric care; Tertiary care facility providing significant levels of specialty care; Hospital or Polyclinic providing primarily outpatient care, etc.)

Is this primary role of the facility expected to change under the cost recovery program? If yes, how and why?

Are there services currently not provided by the facility that should be developed in order to increase income generation of the facility?

ADMINISTRATIVE AND MEDICAL SERVICES OPERATIONAL ASSESSMENT

INSTRUCTIONS FOR USE

GENERAL INSTRUCTIONS

This instrument should be completed by a team consisting of a facility assessment manager, the hospital director, the chief of the medical staff, the head of maintenance and housekeeping, the matron, and the head of purchasing and supply.

HOSPITAL EVALUATION SCALE

Following each of the assessment standards, there is a box in which the facility is to be rated according the *hospital evaluation scale* found at the bottom of each page.

For example, one of the standards requires certain areas and functions of the facility to be served by a standby emergency power source. If the facility being evaluated has an emergency power source that does serve the required areas, the facility *is in compliance*, and box [1] should be marked. In the case of full compliance, no further explanation is required.

If the facility has an emergency generator, that serves *most* of the required areas, and can be easily modified to serve the remaining required areas, the facility is in *partial compliance*, and box [2] should be marked. An explanation of the needed modifications should be recorded in the space provided.

If the facility has an emergency generator that serves *some* of the required areas, and can be modified with comparatively minor effort and expense to serve all of the required areas, the facility is in *non-compliance -- minor effort or expense to achieve full compliance*, and box [3] should be marked. An explanation of the needed modifications should be recorded in the space provided.

If the facility does not have an emergency power source, but could be fitted with one in all of the required areas with a major effort or expense, the facility is in *non-compliance -- major effort or expense to achieve full compliance*, and box [4] should be checked. A complete explanation of the effort or expense involved in bringing the facility into compliance should be entered in the space provided.

If the facility lacks an emergency power source, and for some reason *cannot* be fitted with the required system, the facility is in *non-compliance -- not correctable*, and box [5] should be marked. A complete explanation of the situation should be entered in the space provided.

APPLICANT FACILITY SCREENING INSTRUMENT
ADMINISTRATIVE AND MEDICAL SERVICES OPERATIONAL ASSESSMENT

FACILITY:

CHIEF EVALUATOR:

GOVERNING BODY AND CHIEF EXECUTIVE OFFICER (DIRECTOR)

The facility has a governing body that has overall responsibility for the operation of the facility.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

The governing body meets at least quarterly.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Minutes of these meetings are kept and include the following:

- a. the date of the meeting;
- b. the names of members who attended;
- c. the topics discussed;
- d. the decisions reached and action taken;
- e. the dates for implementation of recommendations; and,
- f. the reports of the chief executive officers and others.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- | | |
|-----|--|
| [1] | FULL COMPLIANCE |
| [2] | PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE |
| [3] | NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE |
| [4] | NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE |
| [5] | NON-COMPLIANCE -- NOT CORRECTABLE |

The governing body, through its chief executive officer, has developed Written Policies and Standard Operating Procedures (SOPs) for the operation of the facility.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Written Policies describe the qualifications, authority, and responsibilities of the chief executive officer.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Written Policies describe the procedure for conferring clinical privileges on all professional staff.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

The qualifications, authority, and duties of the chief executive officer are stated in the governing body's bylaws, rules and regulations.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

MANAGEMENT AND ADMINISTRATIVE SERVICES

The facility has a written plan for health services that describes the following:

- a. the population served, including age groups and other relevant characteristics of the patient population;
- b. the hours and days the facility operates;
- c. the methods used to carry out initial screening and/or triage;
- d. the intake or admission process, including how the initial contact is made with the patient and the family or significant others;
- e. the basic therapeutic programs offered by the facility, such as inpatient, partial day, outpatient, and therapeutic education;

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Within the scope of its activity, the facility has enough appropriate qualified health care professional, administrative, and support staff available to adequately assess and address the identified clinical needs of patients.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

Inpatient programs have fully qualified nurses on duty at all times to plan, assign, supervise, and evaluate nursing care, and to provide for the delivery of nursing care to patients.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

All members of the treatment team who have been assigned specific treatment responsibilities are qualified by training or experience and demonstrated competence and have appropriate clinical privileges.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

There is documentation to verify that health care professional staff meet all GOE requirements for licensing, registration, or certification.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

PERSONNEL POLICIES

Personnel policies are in place that provide for an adequate number of qualified personnel during all hours of operation to support the functions of the facility and the provision of high quality care.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Personnel policies include procedures for recruiting, selecting, contracting, promoting, and terminating staff.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Information on the following items are included in the written personnel policies and procedures:

- a. employee benefits;
- b. recruitment and contracting;
- c. promotion orientation;
- d. training and staff development;
- e. employee grievances;
- f. safety and employee injuries;
- g. relationships with employee organizations;
- h. disciplinary systems;
- i. suspension and termination mechanisms;
- j. wages, hours, and salary administration;

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

- k. rules and conduct;
- l. lines of authority; and,
- m. performance appraisals.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

A personnel record is kept on each staff member

RATING: [1] [2] [3] [4] [5] EXPLANATION:

For each position in the facility, there is a written job description that specifies the duties and responsibilities of the position and the minimum level of education, training, and/or related work experience required or needed to fulfill it.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

MEDICAL STAFF

There is an organized medical staff which is hired, evaluated and contracted by the executive officer that has the overall responsibility for the quality of all clinical care provided to patients.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

The medical staff organization assures that each member is qualified for membership and should encourage the optimal level of professional performance of its members through the appointment/reappointment procedure, the specific delineation of clinical privileges, and management evaluation of performance.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Only those professionals who are licensed, certified, or registered, or who have demonstrated competence and experience, are eligible for professional staff membership.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

The professional staff bylaws, rules and regulations include the following patient records requirements:

- a. the period of time following admission to an inpatient facility within which a history and physical examination must be entered in the patient record;
- b. the time period in which patient records must be completed following discharge;
- c. the entries in patient records that must be dated and authenticated by the responsible physician.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOUSEKEEPING, PHYSICAL PLANT MAINTENANCE AND OPERATION

The facility has written policies and procedures for maintaining a clean and safe environment.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

There are written procedures or guidelines for the use, cleaning, and care of equipment.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

The facility has an organized housekeeping service. A service director and enough persons to fulfill the needs of the service are employed.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Housekeeping personnel responsible for cleanliness in special areas, such as infirmaries, emergency service areas, and special care units, have received special training in the procedures that are unique to these areas.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

All mechanical systems in the facility are maintained in accordance with a written preventive maintenance program.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

All corrective measures instituted or completed are documented.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Storage areas, basement, attics, and stairwells are clean and uncluttered.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Trash is removed from the grounds on a daily basis.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

BIOMEDICAL EQUIPMENT MAINTENANCE

Policies and procedures have been established for all electrical and electronic patient care equipment, for methods and frequency of testing, and for verification of performance and use specifications.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

All new electrical and electronic equipment is tested within the first six months of operation and thereafter on a regular basis.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Written records are maintained of all inspections performed, including any action taken or recommended.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

In facilities in which inhalation anesthetic are administered in any concentration to patients, or in which patients require electromechanical life support systems, an autonomous emergency power source is available on the premises.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

The following areas and functions, when existing, are served by the standby emergency electrical power source:

- a. egress illumination;
- b. exit signs and exit directional signs;
- c. fire, smoke, sprinkler, and oxygen alarms;
- d. special care units;
- e. operating rooms;
- f. delivery rooms;
- g. postoperative recovery rooms;
- h. emergency care areas;
- i. newborn nurseries;
- j. medication preparation areas;
- k. nursing stations;
- l. treatment rooms;
- m. clinical laboratory task areas;
- n. blood storage units;
- o. facility communication system; and

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

p. central suction system.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

A written record is maintained of inspections, performance, exercising period, and repairs of the emergency power source.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

PURCHASING, CENTRAL SUPPLY, AND STERILE SUPPLY

Compressed Gas Cylinders used for compressed gases are capped when not connected and are secured at all times to prevent falling.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Empty cylinders are identified and are stored separately from full or partially-full cylinders.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Oxidizing agents are stored separately from flammable gases and liquids.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

Policies and procedures for the utilization of sterile supplies and equipment have been developed, and cover the following areas:

a. the receipt, cleaning, disinfection, re-sterilization, and preparation of reusable supplies;

b. the assembly, wrapping, identification, storage control, and distribution of supplies;

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

- c. the monitoring of the shelf life or expiration date of supplies and the removal from use of expired supplies;
- d. the use, maintenance, and inspection of sterilizing equipment or sterilizing liquids or gases;
- e. the acquisition of supplies when the usual dispensing unit is closed;
- f. the recall and disposition of supplies when a hazard connected with such supplies is identified; and
- g. the cleaning and sanitizing of work spaces in the preparation of sterile supplies.

RATING: [1] [2] [3] [4] [5] EXPLANATION:

HOSPITAL EVALUATION SCALE

- [1] FULL COMPLIANCE
- [2] PARTIAL COMPLIANCE -- MINOR CHANGE NEEDED TO ACHIEVE FULL COMPLIANCE
- [3] NON-COMPLIANCE -- MINOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [4] NON-COMPLIANCE -- MAJOR EFFORT OR EXPENSE TO ACHIEVE FULL COMPLIANCE
- [5] NON-COMPLIANCE -- NOT CORRECTABLE

EQUIPMENT NEEDS ASSESSMENT FORM A

INSTRUCTIONS FOR USE

GENERAL INSTRUCTIONS

This form is to be distributed to facility staff prior to the facility assessment visits. The section director is responsible for completing the form. Section directors should be strongly encouraged to obtain maximum input from section staff when determining equipment needs. A preferred method for determining section equipment needs is to have each staff member inventory the equipment that they personally use, and to report any needs to the section director. The section director would then collate this information and prioritize the section's needs. The section director should also assure that all *common* equipment that might be missed by staff be inventoried by a designated staff member to assure complete equipment accounting.

FACILITY, SECTION, SECTION DIRECTOR

These areas should be filled out by the project assessment manager prior to distributing the forms to the facility. The rest of the form should be completed by the section director.

PRIMARY FUNCTION OF SECTION

List the primary function of the section. For example, x-ray department, laboratory, kitchen, or patient unit (if patient unit, specify whether patients are primarily surgical, medical, obstetrical or other mix).

NUMBER OF INPATIENTS AND OUTPATIENTS PER YEAR

List the number of patients treated each year in these categories.

NUMBER OF FUNCTIONAL UNITS

If the section is a patient unit, list the number of patient beds. If the section is an x-ray department, list the number of x-ray machines. etc.

ITEM, RANKED BY PRIORITY

When equipment needs have been gathered by the section director, and prioritized according to severity of need, the items most needed by the section for the performance of its duties should be listed in descending order.

NUMBER NEEDED, SEVERITY OF NEED

List the number needed of the priority item and according to the scale, report the impact of this equipment on patient care. The number needed should represent the number of the item according to severity of need. For example, if an intensive care unit needs a respirator without which patient survival is threatened, and could use a second respirator to improve the quality of care, respirators should be listed twice. The first would be listed with *number needed* as 1, and with *severity of need* as 1. The second respirator would be recorded lower on the list, and reported as *number needed* 1, and *severity of need* 3. Those items recorded as having a *severity of need* of 1 should appear first on the list, those items with *severity of need* as 2 should appear second, and those ranked 3 should appear third.

EQUIPMENT NEEDS ASSESSMENT FORM A

FACILITY:

SECTION:

SECTION DIRECTOR:

PRIMARY FUNCTION OF SECTION:

NUMBER OF INPATIENTS PER YEAR:

NUMBER OF OUTPATIENTS PER YEAR:

NUMBER OF FUNCTIONAL UNITS (BEDS, OPERATING ROOMS, X-RAY ROOMS, ETC.):

ITEM, RANKED BY PRIORITY	NUMBER NEEDED	SEVERITY OF NEED
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

SEVERITY OF NEED:

1 = CRITICAL, ABSENCE THREATENS PATIENT SURVIVAL 2 = URGENT, ABSENCE SEVERELY THREATENS QUALITY OF CARE
3 = OBTAINING THIS EQUIPMENT WOULD IMPROVE PATENT CARE

This form is to be completed by facility staff from individual sections and services. An equipment inventory and evaluation will be carried out by Cost Recovery Directorate Staff. This form is to be completed by facility staff prior to the equipment evaluation by the Cost Recovery Project. The form's purpose is to assure that equipment needs expressed by facility staff are taken into consideration in the development of equipment procurement packages for a facility's conversion to a cost recovery facility. It must be clearly understood by facility staff that funds for equipment procurement are very limited, and that the majority of equipment requested will not be procured at this time. It is therefore important that equipment needs are stated according to section priorities and severity of need. In addition, needs for smaller equipment such as blood pressure cuffs and forceps must be weighed against the section's desire for larger, more expensive equipment. For example, the operating block may desire a new portable x-ray machine, while lacking basic surgical tools. The quality of patient care would be greatly improved by procuring scalpels and forceps etc. to complete surgical sets, while the procurement of a new x-ray machine would only moderately improve the quality of patient care.

ARCHITECTURAL ASSESSMENT

INSTRUCTIONS FOR USE

GENERAL

The spaces for *Facility name, Building* (when a facility consists of more than one structure), *Section* (the functional department of the facility such as X-ray, Dietary, Patient Unit, etc), and the *Chief Evaluator* should be filled out in the usual manner.

COMMENTS

Each *section* of the facility is to be evaluated given the criteria contained in the left hand column. The results of this analysis are to be recorded in the *comments* section. A qualified architect experienced in hospital design should be used to complete the analysis, with section specific input provided by *section staff*.

NEED FOR MODIFICATION

When problems are found in the facility's section according to the evaluation criteria, the need for modification or improvement is to be rated according to the scale at the bottom of the page.

DIFFICULTY OF MODIFICATION

When problems are found in the facility's section according to the evaluation criteria, the difficulty of modification is to be assessed according to the scale at the bottom of the page.

COST ESTIMATE

When the architectural evaluation has been completed for the entire section, an estimate of the repair/reconstruction costs of correcting those criteria with a *high or critical* need for modification is to be provided. This is an estimate only, and should be provided as a range between *minimum* and *maximum* costs.

ARCHITECTURAL ASSESSMENT

FACILITY: _____

CHIEF EVALUATOR: _____

BUILDING: _____

SECTION: _____

CRITERIA	COMMENTS	NEED FOR MODIFICATION	DIFFICULTY OF MODIFICATION
SPACE/AREA SUITABILITY			
LOCATION RELATIVE TO OTHER SERVICES			
INTERNAL ARRANGEMENT OF SECTION			
CIRCULATION/TRAFFIC PATTERN: PATIENTS			
CIRCULATION/TRAFFIC PATTERN: STAFF			
CIRCULATION/TRAFFIC PATTERN: SERVICES			
CIRCULATION/TRAFFIC PATTERN: VISITORS			

NEED FOR MODIFICATION/EXPANSION:

1 = NOT NEEDED 2 = SLIGHT NEED 3 = MODERATE NEED 4 = HIGH NEED 5 = CRITICAL NEED

DIFFICULTY OF MODIFICATION/EXPANSION:

1 = VERY EASY 2 = EASY 3 = DIFFICULT 4 = VERY DIFFICULT 5 = IMPOSSIBLE

COST ESTIMATE MINIMUM: _____ £E MAXIMUM: _____ £E

ENGINEERING ASSESSMENT PART A

INSTRUCTIONS FOR USE

GENERAL

The spaces for *Facility name*, *Building* (when a facility consists of more than one structure), *Section* (the functional department of the facility such as X-ray, Dietary, Patient Unit, etc), and the *Chief Evaluator* should be filled out in the usual manner. The page number should also be entered with the forms for each *Section of the facility* starting with page 1.

ROOM

If the facility employs room numbers that are clearly marked and in place at the entrance to a room, these numbers should be recorded in this column of the form. If numbers are not present, the name of the room employed by the section's staff should be recorded.

USE

The spaces in this column should be used to specify how the room is used: i.e. as a patient room, X-ray room, storage room, etc.

FUNCTIONAL CONDITION

Using the scale at the bottom of the page, rate *the room itself* as to its physical condition: 1) The room is in good condition. No structural or cosmetic repairs are needed, paint is new, walls and floor are clean; 2) No cosmetic or structural repairs are necessary; 3) Cosmetic repair is necessary such as trim repaired or old functioning fixtures need replacing, new paint or floor tile severely needed; 4) Structure such as floor, walls, or ceiling need repair; or, 5) Structure or hardware is damaged or deteriorated to the point of posing a significant threat to safety, and major repairs will be necessary before room may be put in service again.

CAPACITY - ACTUAL/OPTIMAL

State the number of beds, x-ray machines, desks, etc. that are presently occupying the room (*Actual*). State the number of beds etc. that the room should contain (*Optimal*). For example, if a patient room contains 6 beds, but should only contain 4, this section of the form would be marked 6/4. If the same room had only 2 beds in it, the section would be marked 2/4.

M²

Record the *approximate* area of the room.

AREA SUITABILITY

Using the scale at the bottom of the page, record if the area of the room is an appropriate size for its *intended purpose*. For example, if a room is designated as an x-ray room, but is so small that a patient on a gurney cannot be rolled up to the side of the x-ray table, then the room is *too small* for its intended purpose (C). If the x-ray room is so large however, that it could be subdivided into two x-ray rooms of adequate size, then the room is *too large* for its intended purpose (A).

COMMENTS

Use this section to record any significant information about the room that is not captured by the other sections of the assessment form.

ENGINEERING ASSESSMENT PART A

FACILITY: _____
BUILDING: _____

CHIEF EVALUATOR: _____
SECTION: _____

ROOM	USE	FUNCTIONAL CONDITION	CAPACITY ACTUAL/OPTIMAL	AREA SUITABILITY	COMMENTS

AREA SUITABILITY
A = TOO LARGE FOR INTENDED PURPOSE
B = ADEQUATE
C = TOO SMALL FOR INTENDED PURPOSE

FUNCTIONAL CONDITION
1 = GOOD
2 = ACCEPTABLE
3 = COSMETIC REPAIR NECESSARY
4 = STRUCTURAL REPAIR NECESSARY
5 = CONDEMNED

ENGINEERING ASSESSMENT PART B

INSTRUCTIONS FOR USE

GENERAL

The spaces for *Facility name*, *Building* (when a facility consists of more than one structure), *Section* (the functional department of the facility such as X-ray, Dietary, Patient Unit, etc), and the *Chief Evaluator* should be filled out in the usual manner. The page number should also be entered with the forms for each *Section of the facility* starting with page 1.

ROOM

If the facility employs room numbers that are clearly marked and in place at the entrance to a room, these numbers should be recorded in this column of the form. If numbers are not present, the name of the room employed by the section's staff should be recorded.

ROOF, WALLS, DOORS/WINDOWS, FLOORS, WATER SUPPLY AND FIXTURES, ELECTRIC SUPPLY AND FIXTURES, MECHANICAL

These columns are to be filled out using the scale on *Functional Condition* located under the last row. 1) The specific item being examined i.e. walls, floor, etc. is in very good condition. 2) The item being inspected is not in any immediate need for cosmetic repair. 3) Cosmetic repair is necessary. 4) Major repair is needed. 5) The structure being examined has been damaged or deteriorated to the point of being hazardous, the room should not be used until this fault is corrected.

REPAIR COST ESTIMATE

An *approximate* estimate of the cost to return the room to good condition. This column is to be used only to record an initial estimate of the cost of repairing the room. **It is to be considered only an estimate**, and is to be used to help the physical plant assessment team keep track of the work that may need to be done if the facility is accepted into the project.

OVERALL STRUCTURAL CONDITION

This area is to be used by the evaluator to record an assessment of the Section or Building as a whole as to the soundness of the *structure* of the building.

SECTION COST ESTIMATE

An aggregate estimate of the cost to bring the entire section to good or acceptable condition is to be recorded by the evaluator. **This is to be an estimate only.** The intention of this estimate is for the project Directorate to have a clear idea of the magnitude of the investment that will need to be made if the facility is brought into the project. It is very important for the *maximum cost* not to be underestimated.

ENGINEERING ASSESSMENT PART B

FACILITY: _____

CHIEF EVALUATOR: _____

BUILDING: _____

SECTION: _____

ROOM	CEILING	WALLS	DOORS/ WINDOWS	FLOORS	WATER SUPPLY & FIXTURES	ELECTRIC SUPPLY & FIXTURES	MECHANICAL	REPAIR COST ESTIMATE
								£E
								£E
								£E
								£E
								£E
								£E
								£E
								£E
								£E
								£E

FUNCTIONAL CONDITION

1 = GOOD 2 = ACCEPTABLE 3 = COSMETIC REPAIR NECESSARY 4 = MAJOR REPAIR NECESSARY 5 = CONDEMNED

OVERALL STRUCTURAL CONDITION:

SECTION COST ESTIMATE: MINIMUM: _____ **£E** **MAXIMUM:** _____ **£E**

ENGINEERING ASSESSMENT PARTS C AND D

INSTRUCTIONS FOR USE

GENERAL

The spaces for *Facility name*, *Building* (when a facility consists of more than one structure), and the *Chief Evaluator* should be filled out in the usual manner. The page number should also be entered with the forms for each *building of the facility* starting with page 1.

FUNCTIONAL CONDITION

Each of the systems listed on the form are to be evaluated according to the scale at the bottom of the page.

COMMENTS

Describe the overall condition of the system evaluated, and explain any repairs necessary. Also describe the urgency of any needed repair.

REPAIR COST ESTIMATE

Provide a conservative cost estimate for the repair or replacement of the evaluated system.

ENGINEERING ASSESSMENT PART C

FACILITY: _____

CHIEF EVALUATOR: _____

BUILDING: _____

SYSTEM	FUNCTIONAL CONDITION	COMMENTS	REPAIR COST ESTIMATE
AIR CONDITIONING			£E
BOILER			£E
INCINERATORS			£E
MEDICAL GASSES			£E
ELEVATORS			£E

FUNCTIONAL CONDITION

1 = GOOD

2 = ACCEPTABLE

3 = MINOR REPAIR NECESSARY

4 = MAJOR REPAIR NECESSARY

5 = CONDEMNED

ENGINEERING ASSESSMENT PART D

FACILITY: _____

CHIEF EVALUATOR: _____

BUILDING: _____

SYSTEM	FUNCTIONAL CONDITION	COMMENTS	REPAIR COST ESTIMATE
ELECTRICAL TRANSFORMERS			£E
ELECTRICAL MAIN FEED AND PANELS			£E
EMERGENCY POWER			£E
TELEPHONE SERVICE			£E
WATER SERVICE			£E
SEWAGE FACILITY			£E

FUNCTIONAL CONDITION

1 = GOOD

2 = ACCEPTABLE

3 = MINOR REPAIR NECESSARY

4 = MAJOR REPAIR NECESSARY

5 = CONDEMNED

PART D PAGE _____